

SN. 09/881,196 ATTORNEY DOCKET NO. CANO:030

IN THE ABSTRACT

*Replace the Abstract with the following replacement Abstract:*

-- An arithmetic decoding method and apparatus process both binary image data and multi-level image data. When 4-bit image data is decoded, four complete sets of pairs of a more probable symbol and a state value or a probability estimate corresponding to pixels of four bitplanes are stored in corresponding ones of four predicted state memories. When less than 4-bit image data is to be decoded, a complete set of pairs of the more probable symbol and state value or the probability estimate corresponding to pixels of each bitplane are allocated to and stored in at least part of the four state memories. Ones of the pairs of the more probable symbol and the state value or the probability estimate are sequentially read from the four state memories and are used to sequentially decode the pixels. --